RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	/0/723,083
Source:	1.FWO
Date Processed by STIC:	11/15/04

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IFWO

RAW SEQUENCE LISTING DATE: 11/15/2004
PATENT APPLICATION: US/10/723,083 TIME: 14:41:04

Input Set : A:\0109144.00143.rtf

Output Set: N:\CRF4\11152004\J723083.raw

```
3 <110> APPLICANT: Altosaar, Illimar
             Sardana, Ravinder
      5
             Dudani, Aail
      6
             Ganz, Peter
              Tackaberry, Eilleen
      9 <120> TITLE OF INVENTION: Production of GM-CSF in Plants
     11 <130> FILE REFERENCE: O8-898901US
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/723,083
    14 <141> CURRENT FILING DATE: 2003-11-26
    16 <150> PRIOR APPLICATION NUMBER: Canada 2,410,702
    17 <151> PRIOR FILING DATE: 2002-11-26
    19 <160> NUMBER OF SEQ ID NOS: 4
    21 <170> SOFTWARE: PatentIn version 3.1
    23 <210> SEQ ID NO: 1
    24 <211> LENGTH: 458
    25 <212> TYPE: DNA
    26 <213> ORGANISM: Homo sapiens
    28 <220> FEATURE:
    29 <221> NAME/KEY: CDS
    30 <222> LOCATION: (10)..(438)
     31 <223> OTHER INFORMATION:
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                  Met His His His His His Ser Ser Gly Ile Glu Gly Arg
     35
    36
                                                                               99
     38 atg gcg cca gcg cgc agc ccg agc ccg tcc acc cag ccg tgg gag cac
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                            20
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     42 gtg aac gcg atc cag gag gcc cgc agg ctc ctc aac ctc tcc cgc gac
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    43 Val Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp
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                        35
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    47 Thr Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe
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     51 Asp Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys
     54 cag ggc ctc cgc ggc agc ctc acc aag ctc aag ggc ccg ctc acc atg
                                                                              291
     55 Gln Gly Leu Arq Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met
                                                                              339
     57 atg qcg tcc cac tac aag cag cac tgc cca ccg acc ccg gag acc tcc
     58 Met Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser
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										gag								387
		ys A	Ala	Thr	Gln		Ile	Thr	Phe	Glu	Ser 120	Phe	Lys	Glu	Asn	Leu 125	Lys	
	63 65 c	rac t	itc -	ctc	ctc	115 ata	atc	cca	ttc	gac		taa	qaq	ccq	ata		gag	435
										Asp								
	67				130					135					140			450
		-					tgcc	:g										458
					NO: [: 14													
		212:				_												
	75 <	:213	> OR	GANI	SM:	Homo	sap	iens	3									
					ICE:			•	_	_	~ 7		~ 1	~7			37 -	
			His	His	His	His 5	His	His	Ser	Ser	GLY 10	He	Glu	GTA	Arg	Met 15	Ala	
	80 I		Δla	Ara	Ser	-	Ser	Pro	Ser	Thr		Pro	Trp	Glu	His		Asn	
	84			9	20					25					30			
	87 <i>I</i>	Ala :	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr	Ala	
	88			35	_	~7	 1	7	40	** - 7	~1 -	0	a 1	45	Dha	7. ~~	T 011	
			GLU 50	Met	Asn	GIU	Thr	va1 55	GIŲ	Val	ше	ser	61u	мет	Pne	Asp	Leu	
	92 95 (Pro	Thr	Cvs	Leu		Thr	Arg	Leu	Glu		Tyr	Lys	Gln	Gly	
	96 6			-,- +		- 2	70			J		75		•	-		80	
	99 I	Leu Z	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys		Pro	Leu	Thr	Met		Ala	
	100	_				85		- a	- D	- D	90	. D.		. mb.	. Co.	95 - C	, 7,7 -	
	103	Ser	His	Tyr	: Lys		i HIS	Cys	Pro	105		PIC) GI	1 1111	110		s Ala	
		Thr	Gln	Ile			r Phe	e Glu	ı Sei			s Glu	ı Ası	ı Leı			Phe	
	108			115	j				120	0				125	5			
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>	124																	
																	g gca	48
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-	127		acc	cac	ı toa	5 9 CC	r agg	י כככ	r ago	acc		7 000	t.ac	a dad	r cat		g aat	96
	130	Pro	Ala	Arc	, ccc , Sei	r Pro	Sei	r Pro	Sei	r Thi	r Gli	n Pro	o Tri	o Gli	ı His	s Va.	l Asn	
	131				20					25					30			
	133	gcc	atc	cag	g gag	g gc	c cgg	g cgt	cto	c ct	gaad	ct	gagt	aga	a gad	c act	gct	144
		Ala	Ile		ı Glı	ı Ala	a Arg	g Arg		ı Leı	ı Ası	ı Leı	ı Sei	r Arg 45	g Ası	p Thi	Ala	
	135	act	gag	35 ato	ı aat	- da:	a aca	a ata	40 a ga	a ata	ata	a tida	a daa		a tti	t dad	c ctc	192
	1 C.	gct	949	مدر	,	- gae	a ucc	- 900	- yu	- 30:	,				,	- 550		- '

RAW SEQUENCE LISTING DATE: 11/15/2004
PATENT APPLICATION: US/10/723,083 TIME: 14:41:04

Input Set : A:\0109144.00143.rtf

Output Set: N:\CRF4\11152004\J723083.raw

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	Leu	Arg	Gly	Ser		Thr	Lys	Leu	Lys		Pro	Leu	Thr	Met		Ala	
147					85					90					95		
	_			-	_		tgc				_	_					336
	Ser	His	Tyr	-	GIn	His	Cys	Pro		Thr	Pro	GIu	Thr		Cys	Ala	
151				100					105					110	<u> </u>		304
		_					gaa	_					_	_	_		384
	Thr	GIN		тте	Thr	Pne	Glu		Pne	гув	GIU	ASII		гуѕ	Asp	Pne	
155			115				~~~	120		~~~	~~~	~+ ~	125	~~~	+~-		420
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	<212				± 2											•	
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	<400 Met		-			His	His	Ser	Ser	Glv	Tle	Glu	Glv	Ara	Met	Ala	
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169 170 173 174 177 178	Met 1 Pro Ala	His Ala Ile	His Arg Gln 35	His Ser 20 Glu	His 5 Pro Ala	Ser Arg	Pro	Ser Leu 40	Thr 25 Leu	10 Gln Asn	Pro Leu	Trp Ser	Glu Arg 45	His 30 Asp	15 Val Thr	Asn Ala	
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169 170 173 174 177 178 181 182	Met 1 Pro Ala Ala Gln	His Ala Ile Glu 50	His Arg Gln 35 Met	His Ser 20 Glu Asn	His 5 Pro Ala Glu	Ser Arg Thr	Pro Arg Val 55	Ser Leu 40 Glu	Thr 25 Leu Val	10 Gln Asn Ile	Pro Leu Ser	Trp Ser Glu 60	Glu Arg 45 Met	His 30 Asp Phe	15 Val Thr Asp	Asn Ala Leu	
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169 170 173 174 177 178 181 182 185 186 189 190 193	Met 1 Pro Ala Ala Gln 65 Leu Ser	His Ala Ile Glu 50 Glu Arg	His Arg Gln 35 Met Pro Gly Tyr	Ser 20 Glu Asn Thr Ser Lys 100	His 5 Pro Ala Glu Cys Leu 85 Gln	Ser Arg Thr Leu 70 Thr	Pro Arg Val 55 Gln Lys	Ser Leu 40 Glu Thr Leu Pro	Thr 25 Leu Val Arg Lys Pro 105	10 Gln Asn Ile Leu Gly 90 Thr	Pro Leu Ser Glu 75 Pro	Trp Ser Glu 60 Leu Leu Glu	Glu Arg 45 Met Tyr Thr	His 30 Asp Phe Lys Met Ser 110	15 Val Thr Asp Gln Met 95 Cys	Asn Ala Leu Gly 80 Ala	
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169 170 173 174 177 178 181 182 185 186 189 190 193 194 197	Met 1 Pro Ala Ala Gln 65 Leu Ser Thr	His Ala Ile Glu 50 Glu Arg His Gln	His Arg Gln 35 Met Pro Gly Tyr Ile 115	Ser 20 Glu Asn Thr Ser Lys 100 Ile	His 5 Pro Ala Glu Cys Leu 85 Gln	Ser Arg Thr Leu 70 Thr His	Pro Arg Val 55 Gln Lys Cys	Ser Leu 40 Glu Thr Leu Pro Ser 120	Thr 25 Leu Val Arg Lys Pro 105 Phe	10 Gln Asn Ile Leu Gly 90 Thr	Pro Leu Ser Glu 75 Pro Pro Glu	Trp Ser Glu 60 Leu Leu Glu Asn	Glu Arg 45 Met Tyr Thr Leu 125	His 30 Asp Phe Lys Met Ser 110 Lys	15 Val Thr Asp Gln Met 95 Cys	Asn Ala Leu Gly 80 Ala	
169 170 173 174 177 178 181 182 185 186 189 190 193 194 197	Met 1 Pro Ala Ala Gln 65 Leu Ser Thr	His Ala Ile Glu 50 Glu Arg His Gln	His Arg Gln 35 Met Pro Gly Tyr Ile 115	Ser 20 Glu Asn Thr Ser Lys 100 Ile	His 5 Pro Ala Glu Cys Leu 85 Gln	Ser Arg Thr Leu 70 Thr His	Pro Arg Val 55 Gln Lys Cys Glu	Ser Leu 40 Glu Thr Leu Pro Ser 120	Thr 25 Leu Val Arg Lys Pro 105 Phe	10 Gln Asn Ile Leu Gly 90 Thr	Pro Leu Ser Glu 75 Pro Pro Glu	Trp Ser Glu 60 Leu Leu Glu Asn	Glu Arg 45 Met Tyr Thr Leu 125	His 30 Asp Phe Lys Met Ser 110 Lys	15 Val Thr Asp Gln Met 95 Cys	Asn Ala Leu Gly 80 Ala	

VERIFICATION SUMMARY

DATE: 11/15/2004

PATENT APPLICATION: US/10/723,083

TIME: 14:41:05

Input Set : A:\0109144.00143.rtf

Output Set: N:\CRF4\11152004\J723083.raw

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